Claim 112 – The subject matter of claim 112 was not included in any of the Released Version(s).

Claim 116 – The subject matter of claim 116 was not included in any of the Released Version(s).

Claim 118 – The subject matter of claim 118 was not included in any of the Released Version(s).

Claim 121 – The subject matter of claim 121 was not included in any of the Released Version(s).

Claim 135 – The subject matter of claim 135 was not included in any of the Released Version(s).

Applicant refers to the Examiner to Section 2.3 of this Response, which addresses in part why the prior Released Version(s) did not include features of each of the above independent claims.

2.2

Claim 66 – The subject matter of claim 66 was not included in any of the Released Version(s). The Released Version(s) allowed the user to manually create a graphical program using direct user input selecting a plurality of nodes and specifying interconnections between the plurality of nodes. However, the Released Version(s) did not include automatically generating the new graphical program without direct user input selecting the plurality of nodes and without direct user input specifying the interconnections between the plurality of nodes.

Claim 67 – The subject matter of claim 67 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program including a block diagram portion and a user interface portion. However, the Released Version(s) did not include automatically generating a new graphical program which included automatically generating the block diagram portion and the user interface portion.

Claim 68 – The subject matter of claim 68 was not included in any of the Released Version(s). The Released Version(s) allowed the user to manually create a graphical program by direct user input selecting and interconnecting a plurality of graphical program objects in the graphical program. However, the Released Version(s) did not include a method of automatically generating a new graphical program that included creating and interconnecting a plurality of graphical program objects in the new graphical program, where the interconnected plurality of graphical program objects comprise at least a portion of the new graphical program.

Claim 69 – The subject matter of claim 69 was not included in any of the Released Version(s). The Released Version(s) allowed the user to manually create a graphical program and create one or more user interface objects in the graphical program. However, the Released Version(s) did not include a method of automatically generating a new graphical program including creating one or more user interface objects in the new graphical program, wherein the one or more user interface objects perform one or more of providing input to or displaying output from the new graphical program.

Claim 70 – The subject matter of claim 70 was not included in any of the Released Version(s). The Released Version(s) included the ability for a user to manually create graphical programs that were virtual instruments. However, the Released Version(s) did not include a "new graphical program" that was automatically generated as recited in independent claim 65.

Claim 71 – The subject matter of claim 71 was not included in any of the Released Version(s). The Released Version(s) included graphical programs that were manually created by a user. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program that was a graphical program.

Claim 72 – The subject matter of claim 72 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a

graphical program that implements a computational process. However, the Released Version(s) did not include a graphical program generation (GPG) program. Further, the Released Version(s) did not include a GPG program automatically generating a new graphical program, where the information received by the GPG program specifies a computational process, and where the GPG program is operable to generate a new graphical program that implements the specified computational process.

Claim 73 – The subject matter of claim 73 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program that implements an algorithm. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating a new graphical program, where the information received by the GPG program specifies an algorithm, and where the GPG program is operable to generate a new graphical program that implements the specified algorithm.

Claim 74 – The subject matter of claim 74 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating a new graphical program, where the information received by the GPG program specifies a state diagram, and where the GPG program is operable to generate a new graphical program that implements the specified state diagram.

Claim 75 – The subject matter of claim 75 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating a new graphical program, where the information received by the GPG program specifies a

prototype, and where the GPG program is operable to generate a new graphical program that implements the specified prototype.

Claim 76 – The subject matter of claim 76 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program that implements a test executive sequence. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating a new graphical program, where the information received by the GPG program specifies a test executive sequence, and where the GPG program is operable to generate a new graphical program that implements the specified test executive sequence.

Claim 77 – The subject matter of claim 77 was not included in any of the Released Version(s). The Released Version(s) allowed the user to manually create a graphical program that implements a desired functionality. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating a new graphical program, where the GPG program receiving information comprises the GPG program receiving user input specifying desired functionality of the new graphical program, and where the GPG program is operable to generate a new graphical program that implements the specified desired functionality.

Claim 78 – The subject matter of claim 78 was not included in any of the Released Version(s). The Released Version(s) included a graphical programming development environment application. However, the Released Version(s) did not include a graphical program generation (GPG) program that comprised a graphical programming development environment application.

Claim 79 – The subject matter of claim 79 was not included in any of the Released Version(s). However, the Released Version(s) did not include a graphical

program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program receiving information specifying an instrumentation function, and where the GPG program is operable to generate a new graphical program that implements the specified instrumentation function.

Claim 80 – The subject matter of claim 80 was not included in any of the Released Version(s). The Released Version(s) included instrumentation functions. However, the Released Version(s) did not include a GPG program receiving information specifying an instrumentation function, such as a test and measurement function or an industrial automation function.

Claim 81 – The subject matter of claim 81 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating a new graphical program, where the information received by the GPG program comprises information regarding an existing program having program functionality, and where the GPG program is operable to generate a new graphical program that implements at least a portion of the program functionality of the existing program.

Claim 82 – The subject matter of claim 82 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include the ability to automatically generate a graphical program from an existing graphical program.

Claim 83 - The subject matter of claim 83 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a plurality of graphical programs. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the

Released Version(s) did not include a GPG program automatically generating a plurality of new graphical programs, depending on the received information.

Claim 84 - The subject matter of claim 84 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program that has program functionality. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating a new graphical program with program functionality. The Released Version(s) did not include a GPG program operable to determine at least a portion of the program functionality independently of the received information.

Claim 85 - The subject matter of claim 85 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program that has additional functionality. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating the new graphical program such that the new graphical program implemented additional functionality in addition to the functionality specified by the received information.

Claim 86 - The subject matter of claim 86 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program comprising graphical program code. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating the new graphical program. The Released Version(s) did not include a GPG program operable to receive code generation information specifying how to generate at least a portion of the graphical program code.

Claim 87 - The subject matter of claim 87 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical

program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating the new graphical program by calling an application programming interface (API) enabling the automatic generation of a graphical program.

Claim 88 - The subject matter of claim 88 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program that automatically generated the new graphical program by automatically requesting a server program to generate the new graphical program.

Claim 89 - The subject matter of claim 89 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include a GPG program automatically generating the new graphical program by automatically requesting a server program to generate the new graphical program, where the server program is an application instance of a graphical programming environment.

Claim 90 – The subject matter of claim 90 was not included in any of the Released Version(s). Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program that comprises a client portion and a server portion, where the client portion is operable to utilize an application programming interface (API) in order to direct the server program to automatically generate the new graphical program.

Claim 91 – The subject matter of claim 91 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program, where the client portion of the GPG program executes in a first computer system, where the server portion of the GPG program executes in a second computer system, and where the first computer system is connected to the second computer system.

Claim 92 – The subject matter of claim 92 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create and execute a graphical program to perform functionality during execution. However, the Released Version(s) did not include automatically generating and executing the new graphical program, where the new graphical program is operable to perform the specified functionality during execution.

Claim 93 – The subject matter of claim 93 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program implementing only a portion of functionality. However, the Released Version(s) did not include automatically generating the new graphical program, where the new graphical program implements only a portion of the specified functionality.

Claim 94 – The subject matter of claim 94 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create and modify a graphical program. However, the Released Version(s) did not include automatically generating the new graphical program and adding additional graphical code to the new graphical program, in response to manual user input, in order to complete the new graphical program.

Claim 95 – The subject matter of claim 95 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a

graphical program by manually including at least one graphical program object in the graphical program. However, the Released Version(s) did not include automatically generating the new graphical program, where automatically generating the new graphical program comprises including at least one graphical program object in the new graphical program.

Claim 96 – The subject matter of claim 96 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a block diagram having a function node. However, the Released Version(s) did not include automatically generating the new graphical program, wherein the new graphical program includes a block diagram, where automatically generating the new graphical program comprises including a function node placed in the block diagram.

Claim 97 – The subject matter of claim 97 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a block diagram having a structure. However, the Released Version(s) did not include automatically generating the new graphical program, wherein automatically generating the new graphical program comprises including an automatic structure placed in the block diagram.

Claim 98 – The subject matter of claim 98 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program having a user interface panel, where the user could manually place a user interface object in the user interface panel. However, the Released Version(s) did not include automatically generating the new graphical program, wherein said automatically generating the new graphical program comprises including a user interface object placed in the user interface panel.

Claim 99 – The subject matter of claim 99 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually place a user interface input object in a user interface panel for viewing or providing input to a graphical program. However, the Released Version(s) did not include automatically

generating the new graphical program, wherein automatically generating the new graphical program comprises including a user interface input object in a user interface panel for performing one or more of: viewing input to the new graphical program; or providing input to the new graphical program.

Claim 100 – The subject matter of claim 100 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually place a user interface output object in a user interface panel for viewing output of a graphical program. However, the Released Version(s) did not include automatically generating the new graphical program, wherein automatically generating the new graphical program comprises including a user interface output object in a user interface panel for viewing output of the new graphical program.

Claim 101 – See Claim 99

Claim 102 – See Claim 100

Claim 103 – The subject matter of claim 103 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. The Released Version(s) allowed a user to manually include a first and a second graphical program object in the graphical program and to manually connect the first graphical program object to the second graphical program object. However, the Released Version(s) did not include automatically generating the new graphical program, where automatically generating the new graphical program comprises including a first graphical program object and a second graphical program object in the new graphical program, and connecting the first graphical program object to the second graphical program object.

Claim 104 – The subject matter of claim 104 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a

graphical program. The Released Version(s) allowed a user to manually include a first and a second graphical program object in the graphical program and to manually connect an input of the first graphical program object to an output of the second graphical program object. However, the Released Version(s) did not include automatically generating the new graphical program, where automatically generating the new graphical program comprises connecting an input of a first graphical program object to an output of a second graphical program object.

Claim 105 – The subject matter of claim 105 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program and include at least one graphical program object in the graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating the new graphical program, wherein the GPG program is a graphical program, wherein the GPG program includes at least one object creation node for automatically creating at least one graphical program object in the new graphical program, and where generating the new graphical program comprises including the at least one graphical program object in the new graphical program.

Claims 106 and 107 – The subject matter of claims 106 and 107 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program and include at least one graphical program object in the graphical program. The Released Version(s) also included property nodes. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program having a property node that operates to get or set a property of the graphical program object in response to executing the GPG program.

Claims 108 and 109 – The subject matter of claims 108 and 109 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually

create a graphical program and include at least one graphical program object in the graphical program. The Released Version(s) also included invoke nodes. However, the Released Version(s) did not include a GPG program having an invoke node, where the invoke node was operable to invoke a method on the graphical program object in response to executing the GPG program.

Claim 110 – The subject matter of claim 110 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program and include at least one graphical program object in the graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include the feature of configuring the object creation node of the GPG program, where configuring comprises specifying a graphical program object class for the object creation node, and where the at least one graphical program object included in the new graphical program is of the graphical program object class.

Claim 111 – The subject matter of claim 111 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include a graphical program generation (GPG) program as recited in the present claims. Further, the Released Version(s) did not include a GPG program automatically generating the new graphical program, wherein the GPG program is a graphical program, and wherein the GPG program includes at least one graphical program creation node for automatically creating the new graphical program.

Claim 113 – The subject matter of claim 113 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually modify a graphical program by direct user input specifying modification to the plurality of nodes and specifying modification to the interconnections between the plurality of nodes. However, the Released Version(s) did not include automatically modifying an existing

graphical program, where automatically modifying the existing graphical program modifies the existing graphical program without direct user input specifying modification to the plurality of nodes and without direct user input specifying modification to the interconnections between the plurality of nodes.

Claim 114 – The subject matter of claim 114 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually modify a graphical program by manually adding graphical code to the existing graphical program. However, the Released Version(s) did not include automatically modifying an existing graphical program, where modifying the existing graphical program comprises adding graphical code to the existing graphical program

Claim 115 – The subject matter of claim 115 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not include automatically modifying an existing graphical program, where receiving information during program execution comprises receiving user input specifying desired functionality to add to the existing graphical program.

Claim 117 – See Claim 66

Claim 119 – See Claim 66

Claim 120 – See Claim 67

Claim 122 – See Claim 66

Claim 123 – See Claim 67

Claim 124 – See Claim 68

Claim 125 – The subject matter of claim 125 was not included in any of the Released Version(s). The Released Version(s) allowed the user to manually create a graphical program and manually create a plurality of graphical program objects in the graphical program. The Released Version(s) allowed the user to manually interconnect the plurality of graphical program objects in the graphical program, where the interconnected plurality of graphical program objects comprise at least a portion of the graphical program. However, the Released Version(s) did not automatically generate a new graphical program. Further, the Released Version(s) did not automatically generate a new graphical program, wherein automatically generating the new graphical program, the program instructions are executable to automatically create and automatically interconnect a plurality of graphical program objects in the new graphical program, where the interconnected plurality of graphical program objects comprise at least a portion of the new graphical program.

Claim 126 – The subject matter of claim 126 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program and manually create one or more user interface objects in the graphical program, wherein the one or more user interface objects perform one or more of providing input to or displaying output from the new graphical program. However, the Released Version(s) did not automatically generate a new graphical program. Further, the Released Version(s) did not automatically generate a new graphical program, wherein automatically generating the new graphical program, the program instructions are executable to automatically create one or more user interface objects in the new graphical program, wherein the one or more user interface objects perform one or more of providing input to or displaying output from the new graphical program.

Claim 127 – The subject matter of claim 127 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program, where the graphical program implements a measurement function. However, the Released Version(s) did not automatically generate a new graphical program that implements a measurement function.

Claim 128 – The subject matter of claim 128 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program that implements a desired functionality. However, the Released Version(s) did not automatically generate a new graphical program.

Further, the Released Version(s) did not automatically generate a new graphical program based on received information, wherein the received information comprises user input specifying desired functionality of the new graphical program, wherein the generated new graphical program implements the specified desired functionality.

Claim 129 – The subject matter of claim 129 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program using a graphical programming development environment application. However, the Released Version(s) did not automatically generate a new graphical program. Further, the Released Version(s) did not automatically generate a new graphical program using a graphical programming development environment application.

Claim 130 – The subject matter of claim 130 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not automatically generate a new graphical program. Further, the Released Version(s) did not automatically generate a new graphical program, wherein the received information comprises information regarding an existing program having program functionality, and wherein the generated new graphical program implements at least a portion of the program functionality of the existing program.

Claim 131 – The subject matter of claim 131 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a plurality of graphical programs. However, the Released Version(s) did not automatically generate a new graphical program. Further, the Released Version(s) did not

automatically generate a plurality of new graphical programs depending on received information.

Claim 132 – The subject matter of claim 132 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not automatically generate a new graphical program. Further, the Released Version(s) did not automatically generate a new graphical program, where the generated new graphical program implements additional functionality in addition to the functionality specified by the received information.

Claim 133 – The subject matter of claim 133 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program. However, the Released Version(s) did not automatically generate a new graphical program. Further, the Released Version(s) did not automatically generate a new graphical program, where the new graphical program implements only a portion of the specified functionality.

Claim 134 – The subject matter of claim 134 was not included in any of the Released Version(s). The Released Version(s) allowed a user to manually create a graphical program and manually add additional graphical code to the graphical program in response to manual user input in order to complete the graphical program. However, the Released Version(s) did not automatically generate a new graphical program. Further, the Released Version(s) did not automatically generate a new graphical program, wherein the new graphical program is a partial program. The Released Version(s) also did not include the feature of adding additional graphical code to the automatically generated new graphical program in response to manual user input in order to complete the new graphical program.

Claim 136 – See Claim 125

Claim 137 – See Claim 126.

Claim 138 – See Claim 127.

Claim 139 – See Claim 128.

Claim 140 – See Claim 129.

Claim 141 – See Claim 130.

Claim 142 – See Claim 131.

Claim 143 – See Claim 132.

Claim 144 – See Claim 133.

Claim 145 – See Claim 134.

2.3

The subject matter "automatically generating the new graphical program is performed without direct user input specifying the new graphical program" was not included in any of the Released Version(s). More specifically, the prior Released Version(s) of LabVIEW did not have a feature of automatically generating a new graphical program without direct user input specifying the new graphical program, e.g., without requiring user specification of the nodes and connections between the nodes. Prior Released Version(s) of LabVIEW required the user to manually select nodes and manually draw connections between the nodes in order to create a graphical program. Prior Released Version(s) of LabVIEW also did not have a feature of automatically

modifying an existing graphical program without direct user input specifying the modification to the existing graphical program.

Applicant notes that National Instruments, the assignee of the present application, had previously offered for sale a product called BridgeVIEW. The BridgeVIEW product had a feature where a user could select front panel controls or indicators, and in response BridgeVIEW would display a corresponding pre-made template graphical program having parameters that were populated with values entered by the user. This BridgeVIEW feature is described in U.S. Patent Nos 5,966,532 and 6,053,951, which were cited in an Information Disclosure Statement mailed on May 6, 2005. Applicant notes that this BridgeVIEW feature could not automatically generate a new graphical program as recited in the present claims, but rather only displayed previously created template graphical programs. This BridgeVIEW feature also did not have various other elements of the present claims.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5150-44100/JCH.

Also enclosed herewith are the following items:

☒ Return Receipt Postcard

Respectfully submitted,

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